

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1.        A communication system having ~~a scanner and an image communication apparatus communicating with said scanner~~ an image input apparatus and an image formation apparatus for communicating with said image input apparatus, said system comprising:

a wireless communication device which communicates ~~communicating means for communicating~~ between said image formation apparatus and said ~~scanner~~ image input apparatus via a wireless line, and having a plurality of communication modes;

~~image read completion detecting means for detecting that said scanner completes image read~~ a detection device which detects a predetermined operation by a user for instructing said image formation apparatus to perform a predetermined process on an image input by said image input apparatus; and

~~controlling means for releasing standby mode when said scanner completes image read~~ a control device which changes modes of said wireless communication device in accordance with a detection result by said detection device, and for controlling transmission of the image input by said image input apparatus in the changed mode to said image formation apparatus.

Claim 2. (Currently Amended): ~~[[The]]~~ A communication system according to claim 1, ~~wherein said controlling means sends to said image communication apparatus a command to notify that the standby mode is released~~ further comprising:

a selecting device which selects printing of the image input by said image input apparatus;

a command sending device which sends a command to request start of transmission of print data from said image input apparatus to said image formation apparatus, after the mode of said wireless communication device is changed by said control device, if printing is selected; and

a start device which starts to transmit an image stored in a memory of said image input apparatus to said image formation apparatus, in response to the command of said image formation apparatus.

Claim 3. (Currently Amended): ~~[[The]]~~ A communication system according to claim 1, further comprising:

a selecting means for selecting printing device which selects transmission of the image read by said scanner input by said image input apparatus to a communication line connected to said image formation apparatus;

request command sending means for sending a command to request start of transmission print data from said scanner to said image communication apparatus after the standby mode is released, if printing is selected a command sending device which sends a command to request start of transmission data from said image input apparatus to said image

formation apparatus after the mode of said wireless communication device is changed by said control device, if transmission to said communication line is selected; and

image data transmission starting means in which said scanner starts transmission of image data stored in a memory, when said scanner receives from said image communicating apparatus a command to permit start of transmission of print data a start device to start to transmit the image stored in a memory of said image input apparatus to said image formation apparatus in response to the command of said image formation apparatus.

Claim 4. (Currently Amended): [[The]] A communication system according to claim 1, wherein said wireless communication device is operable to establish a wireless link through an initial connection procedure, and, in accordance with a predetermined condition, to change the mode to a low power consumption connection mode in which an initial connection procedure is not necessary further comprising:

selecting means for selecting transmission of the image read by said scanner to a communication line connected to said image communication apparatus;

request command sending means for sending a command to request start of transmission of transmission data from the scanner to the image communication apparatus after the standby mode is released, if transmission to said communication line is selected; and

image data transmission starting means in which said scanner starts transmission of image data stored in the memory when said scanner receives from said image communication apparatus a command to permit start of transmission of transmission data.

Claim 5. (Currently Amended): ~~[[The]]~~ A communication system according to claim ~~[[1]]~~ 4, wherein ~~said wireless communicating means establishes a wireless link through an initial connection procedure, opens the wireless link if the standby state is continued for a given time period after establishing the wireless link and performing predetermined communication between said image communication apparatus and said scanner, and makes transition to a low power consumption connection state not requiring the initial connection procedure, at the time of establishing the wireless link again~~ if a given time passes after making the transition to the low power consumption connection mode, said wireless communication device is operable to eliminate the low power consumption connection mode.

Claim 6. (Currently Amended): ~~[[The]]~~ A communication system according to claim ~~[[5]]~~ 1, wherein ~~if given time further passes after making transition to said low power consumption connection state, said wireless communicating means eliminates said low power consumption connection state to open the wireless connection, and makes transition to the state of carrying out said initial connection procedure at the time of establishing the wireless link again~~ said image input apparatus is a portable scanner that can be detached from and attached to said image formation apparatus.

Claim 7. (Currently Amended): ~~[[The]]~~ A communication system according to claim 1, wherein ~~said wireless communicating means establishes a wireless link through an initial connection procedure, opens the wireless link if the standby state is continued for a given time period after establishing the wireless link and performing predetermined communication between said image communication apparatus and said scanner, and makes transition to the state~~

~~of carrying out said initial connection procedure at the time of establishing the wireless link again~~  
control device is operable to change the mode in accordance with the predetermined operation  
and the mode of said wireless communicating device.

Claim 8. (Currently Amended): ~~[[The]]~~ A communication system according to claim ~~[[5]]~~ 1, wherein ~~said scanner is a portable scanner that can be detached from and attached to said image communication apparatus~~ the predetermined operation is an operation for outputting the image input by said image input apparatus by said image communication apparatus.

Claim 9. (Currently Amended): A communication system according to claim 8,  
wherein said output includes at least one of print output and output to the communication line  
connected to said image formation apparatus. ~~having a scanner and an image communication~~  
~~apparatus communicating with said scanner, comprising:~~

~~wireless communicating means capable of performing wireless connection~~  
~~between said image communication apparatus and said scanner, and having a plurality of modes;~~  
~~and~~

~~mode changing means for changing mode of said wireless communicating~~  
~~means if the image read by said scanner is sent to said image communication apparatus~~  
~~depending on a predetermined operation of said scanner.~~

Claim 10. (Currently Amended): ~~[[The]]~~ A communication system according to claim ~~[[9]]~~ 1, wherein ~~said mode changing means changes said mode in accordance with said~~

~~predetermined operation and the mode of said wireless communicating means~~ control device is operable to changes mode change modes so that at least power consumption of said wireless communicating device is changed.

Claim 11. (Currently Amended): ~~[[The]]~~ A communication system according to claim ~~[[9]]~~ 1, wherein said ~~predetermined operation is an operation for outputting the image read by said scanner by said image communication apparatus~~ wireless communicating device is operable to perform communication based on the Bluetooth specification.

Claim 12. (Currently Amended): A method of controlling a communication system having an image input apparatus and an image formation apparatus for communication with the image input apparatus, the image formation apparatus wirelessly communicates with the image input apparatus by a wireless method having a plurality of communication modes, said method comprising the steps of:

detecting a predetermined operation by a user for instructing the image formation apparatus to perform a predetermined process on an image input by the image input apparatus; and

changing the mode of the wireless method in accordance with a detection of the predetermined operation and controlling transmission of the image input by the image input apparatus in the changed mode to the image formation apparatus.

~~The communication system according to claim 11, wherein said output include both of or any one of print output and output to the communication line connected to said image communication apparatus:~~

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Claim 13. (Currently Amended): An image input apparatus comprising:

a wireless communication device which communicates with an image formation apparatus via wireless lines;

a detecting device which detects a predetermined operation by a user for instructing the image formation apparatus to perform a predetermined process on an image input by said image input apparatus;

a changing device which changes a mode of said wireless communication device in accordance with the detection by said detecting device; and

a transmission device with performs a transmission process for transmitting the image input by said image input apparatus in the changed mode to the image formation apparatus.

~~The communication system according to claim 9, wherein said mode changing means changes mode so that at least power consumption of said wireless communicating means is changed.~~

Claim 14. (Currently Amended): An image input apparatus according to claim 13, further comprising:

a selecting device which selects printing of the image input by said image input apparatus; and

a sending device which sends a command to request a start of transmission of print data from said image input apparatus to the image formation apparatus, after the mode of said wireless communication device is changed, if printing is selected.

~~The communication system according to claim 11, wherein said wireless communicating means performs communication based on the Bluetooth specification.~~

Claim 15. (Currently Amended): An image input apparatus according to claim 13, further comprising:

a selecting device which selects transmission of the image input by said image input apparatus to a communication line connected to the image formation apparatus;

a sending device which sends a command to request a start of transmission data from said image input apparatus to the image formation apparatus after the mode of said wireless communication device is changed, if transmission to the communication line is selected.

~~The communication system according to claim 9, wherein said wireless communicating means establishes a wireless link through an initial connection procedure, opens the wireless link if the standby state is continued for a given time period after establishing the wireless link and performing predetermined communication between said image communication apparatus and said scanner, and makes transition to a low power consumption connection state not requiring the initial connection procedure, at the time of establishing the wireless link again.~~

Claim 16. (Currently Amended): An image input apparatus according to claim 13, wherein said wireless communication device is operable to establish a wireless link through an initial connection procedure, and, in accordance with a predetermined condition, to change the mode into a low power consumption connection mode in which the initial connection procedure is not necessary.

~~The communication system according to claim 15, wherein if given time further passes after~~



~~making transition to said low power consumption connection state, said wireless communicating means eliminates said low power consumption connection state to open the wireless connection, and makes transition to the state of carrying out said initial connection procedure at the time of establishing the wireless link again.~~

Claim 17. (Currently Amended): An image input apparatus according to claim 16, wherein if a given time passes after making the transition to the low power consumption connection mode, said wireless communication device is operable to eliminate the low power consumption connection mode.

~~The communication system according to claim 9, wherein said wireless communicating means establishes a wireless link through an initial connection procedure, opens the wireless link if the standby state is continued for a given time period after establishing the wireless link and performing predetermined communication between said image communication apparatus and said scanner, and makes transition to the state of carrying out said initial connection procedure at the time of establishing the wireless link again.~~

Claim 18. (Currently Amended): An image input apparatus according to claim 13, wherein said changing device is operable to change the mode in accordance with the predetermined operation and the mode of said wireless communicating device.

~~A communication apparatus connectable wirelessly to a scanner having a plurality modes associated with wireless communication, comprising:~~

~~detecting means for detecting a predetermined operation; and~~

~~mode changing means for changing said mode of said scanner if the image~~

~~read by said scanner is sent to said image communication apparatus depending on detection by said detecting means:~~

Claim 19. (Currently Amended): An image input apparatus according to claim 13, wherein the predetermined operation is an operation for outputting the image input by said image input apparatus by the image formation apparatus.

~~A communication apparatus, comprising:~~

~~determining means for determining existence/not existence of original for reading an image; and~~

~~controlling means for performing control so that wireless communication with other apparatus is possible, based on the result of determination by said determining means.~~

Claim 20. (Currently Amended): An image input apparatus according to claim 19, wherein the output includes at least one of a print output and an output to the communication line connected to the image formation apparatus.

~~A method for controlling a communication system having a scanner and an image communication apparatus communicating with said scanner, capable of performing wireless connection between said image communication apparatus and said scanner, and having wireless communicating means having a plurality of modes, comprising:~~

~~changing mode of said wireless communicating means if the image read by said scanner is sent to said image communication apparatus depending on a predetermined operation:~~

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Claim 21. (Currently Amended): An image input apparatus according to claim 13,  
wherein said changing device is operable to change the mode such that at least power  
consumption of said wireless communicating device is changed.

~~A method for controlling a communication apparatus connectable wirelessly to a scanner having~~  
~~a plurality modes associated with wireless communication, comprising:~~

~~a detecting step of detecting a predetermined operation; and~~

~~a mode changing step of changing said mode of said scanner if the image~~  
~~read by said scanner is sent to said image communication apparatus depending on detection in~~  
~~said detecting step.~~

Claim 22. (Currently Amended): An image input apparatus according to claim 13,  
wherein said wireless communicating device is operable to perform communication based on the  
Bluetooth specification.

~~A method for controlling a communication apparatus, comprising:~~

~~a determining step of determining existence/not existence of original for~~  
~~reading an image; and~~

~~a controlling step of performing control so that wireless communication~~  
~~with other apparatus is possible, based on the result of determination in said determining step.~~

Claim 23. (New): A method of controlling an image input apparatus, capable of  
communicating with an image formation apparatus by a wireless method having a plurality of  
communication modes, said method comprising the steps of:

detecting a predetermined operation by a user for instructing the image

formation apparatus to perform a predetermined process on an image input by the image input apparatus;

changing a mode of the wireless method in accordance with detection in the predetermined operation; and

transmitting the image input by the image input apparatus in the changed mode to the image formation apparatus.

Claim 24. (New): A storage medium storing a computer program for controlling a processor to carry out a method of claim 23.